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EXAMINER

LINDSEY, MATTHEW S

ART UNIT

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/528,459	<b>Applicant(s)</b> MULLIGAN, MICHAEL	
	<b>Examiner</b> MATTHEW S. LINDSEY	<b>Art Unit</b> 2151	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 March 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>18 March 2005</u> .   | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. Claims 1-25 are pending in this application. Claims 1, 3-9, 11-19, and 21, 22, and 25 are amended as filed on 18 March 2005. Claim 23 in the amendment is improperly numbered, in the original claim listing this claim is numbered 25, and will be treated as claim 25 in this action. Original claims 23 and 24 were not included in the amendment as filed on 18 March 2005, this constitutes an incomplete listing of claims, and for the purposes of examination original claims 23 and 24 will be treated as originally filed.

### ***Claim Objections***

2. Claims 1, 8 and 14 are objected to because of the following informalities: the claims cite the limitation "said current radio broadcast" (Claim 1, line 3, Claim 8, lines 3-4, and Claim 14, line 3). There is lack of antecedent basis for "said current radio broadcast" in these claims. For the purposes of examination, said current radio broadcast will be treated as referring to broadcast data comprising a broadcast from lines 1-2 in claim 1, and the similar term in claims 8 and 14.

3. Claim 22 is objected to because of the following informalities: the claim recites the limitation "according to anyone of claims 19 claim 19" (Claim 22, lines 1-2). For the purposes of examination this will be treated as "according to claim 19".

4. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claim 23 has been renumbered 25.

5. Claim 23 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only. See MPEP § 608.01(n). For the purposes of examination, claim 23 will be treated as dependent only on claim 19.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**7. Claims 1, 3-17, 19-20, and 22-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Mackintosh et al. (US 6,349,329 B1).**

8. With respect to Claim 1, Mackintosh discloses: "Method for providing broadcast data (Abstract, lines 3-5) comprising a broadcast being sent from a broadcast station (Col. 5, lines 13-15) and update additional information data related to said current radio broadcast (Col. 5, lines 36-38), said broadcast data being provided to at least one mobile terminal device (Col. 5, lines 16-17), said mobile terminal device being connected to a server in a wireless (Col. 24, lines 11-14, where the invention can be carried out on one or more computer systems, and Col 24, lines 55-58, where computer systems can include a communications interface 724, and Col. 24, lines 61 – Col 25, line 4, where a communications interface 724 is provided signals from communication channel 728, which can be implemented using a wireless medium) data network (Col. 5, lines 50-58, where the data server provides supplemental materials to the user equipment), said at least one mobile terminal device comprising components for receiving said broadcast from said at least one broadcast station and for receiving said update additional information data from said server (Col. 5, lines 25-33, where delivery of broadcast material can be via wireless communication channel, and the user equipment has an appropriate communication interface), comprising: receiving at the server said update additional information data of said current radio broadcast from said at least one broadcast station (Col. 5, lines 36-38), via a network connection between

said server and said radio station (Col. 5, lines 41-43, where data is sent from the provider to the server and therefore is sent over a network connection), determining at least one mobile terminal device to be supplied with said update additional information data of said current radio broadcast (Col. 5, lines 50-58, where data server provides supplemental materials to user equipment, and therefore must determine user equipment to send the supplemental materials to), and updating said update additional information data of said current radio broadcast with said at least one determined mobile terminal device via said wireless (Col. 24, line 61 – Col. 25, line 4, where communication channel can be implemented using a wireless medium) communication network (Col. 5, line 59 - Col. 6, line 2, where data server retrieves supplemental information pertaining to the specific item being broadcast)”).

9. With respect to Claim 3, Mackintosh discloses: “Method according to claim 1, wherein said update additional information data of said current radio broadcast from said at least one broadcast station is received from at least one second server connected to said at least one broadcast station (Col. 6, lines 3-7, where supplemental information can be stored across multiple servers, and Fig 5, where the servers are connected via the internet to each other and to broadcast station 205)”).

10. With respect to Claim 4, Mackintosh discloses: “Method according to claim 1, wherein said broadcast station comprises one of said servers, wherein said update additional information data is received from a component within said broadcast station

(Col. 7, lines 45-53, where the broadcast station is also responsible for providing the supplemental information)”.

11. With respect to Claim 5, Mackintosh discloses: “Method according to claim 1, further comprising determining whether said update additional information data of said current radio broadcast received from said broadcast station has changed, and updating said update additional information data only, if said update additional information data has changed (Col. 5, line 59-Col. 6, line 2, where the supplemental information is specific to the item being broadcast, such as a current song being played, or an advertising spot being played, and the data server retrieves supplemental information pertaining to the specific item of programming being broadcast. If the broadcast item changes from a song to advertising the supplemental information will change, and Col. 5, line 50-54 where the supplemental information is provided in coordination with the broadcast material)”.

12. With respect to Claim 6, Mackintosh discloses: “Method according to claim 1, further comprising: receiving a transmission from a mobile terminal device indicating that said mobile terminal device is to be supplied with said update additional information data (Col. 6, lines 14-17, where user equipment accesses a server to retrieve supplemental materials), determining said mobile terminal device is to be supplied with said update additional information data (Col. 17, lines 37-39, where the user's terminal must be on and active during a broadcast to have data codes provided, therefore the

Art Unit: 2100

server must determine if the mobile device is on and active or not before sending data), and sending said update additional information data of said current radio broadcast to said mobile terminal device via said wireless communication network (Col. 7, lines 16-26, where user equipment retrieves supplemental material by accessing server 120, which sends the data since the user equipment is able to play/display/provide to the user the supplemental information)".

13. With respect to Claim 7, Mackintosh discloses: "Method according to claim 1, further comprising: receiving a transmission indicating that said mobile terminal device is no longer to be updated with said update additional information data (Col. 12, lines 47-50, where tuning or changing stations from the user terminal will inform the data server to no longer provide supplemental data)".

14. With respect to Claim 8, Mackintosh discloses: "Method for receiving broadcast data in a mobile terminal device (Abstract, lines 6-9), said broadcast data comprising a broadcast being sent from at least one broadcast station (Col. 5, lines 13-15) and update additional information data related to said current radio broadcast (Col. 5, lines 36-38), said mobile terminal device being connected to a server in a wireless (Col. 24, lines 11-14, where the invention can be carried out on one or more computer systems, and Col 24, lines 55-58, where computer systems can include a communications interface 724, and Col. 24, lines 61 – Col 25, line 4, where a communications interface 724 is provided signals from communication channel 728, which can be implemented



using a wireless medium) data network (Col. 5, lines 50-58, where the data server provides supplemental materials to the user equipment), said at least one mobile terminal device comprising components for receiving said broadcast from said at least one broadcast station and for receiving said update additional information data from said server (Col. 5, lines 25-33, where delivery of broadcast material can be via wireless communication channel, and the user equipment has an appropriate communication interface), comprising: receiving said broadcast from said broadcast station via a wireless broadcast channel (Col. 5, lines 24-27), receiving said update additional information data of said current radio broadcast, from said server via said wireless (Col. 24, line 61 – Col. 25, line 4, where communication channel can be implemented using a wireless medium) communication network (Col. 5, lines 50-54), and updating said update additional information data of said current radio broadcast on said mobile terminal device (Col. 6, lines 54-57)".

15. With respect to Claim 9, Mackintosh discloses: "Method according to claim 8, further comprising displaying said update additional information data of said current radio broadcast on said mobile terminal device (Col. 6, lines 54-57, specifically displayed)".

16. With respect to Claim 10, Mackintosh discloses: "Method according to claim 9, further comprising processing said update additional information data of said current radio broadcast for display (Col. 7, lines 29-32)".

17. With respect to Claim 11, Mackintosh discloses: “Method according to claim 8, further comprising transmitting a message to a server in said wireless (Col. 24, line 61 – Col. 25, line 4, where communication channel can be implemented using a wireless medium) communication network to initiate transmission of said update additional information data related to the contents of said currently received broadcast (Col. 6, lines 14-17, where accessing a server to retrieve supplemental material involves transmitting a message)”.

18. With respect to Claim 12, Mackintosh discloses: “Method according to claim 8, further comprising determining a name of said broadcast station transmitting said broadcast (Col. 23, lines 2-4, and Fig 12, object 523, where there must be a way to determine the name of the radio station from which the audio information originates, if the station name is displayed).

19. With respect to Claim 13, Mackintosh discloses: “Method according to claim 12, further comprising displaying the name of said determined broadcast station and said received update additional information data of said current radio broadcast together on a display (Fig 12, object 523, station name, and additional information includes objects 518-521).

Art Unit: 2100

20. With respect to Claim 14, Mackintosh discloses: "Method for providing broadcast data (Abstract, lines 3-5) comprising a broadcast being sent from a broadcast station (Col. 5, lines 13-15) and update additional information data related to said current radio broadcast (Col. 5, lines 36-38) to at least one mobile terminal device (Col. 5, lines 50-54), said broadcast being available for said at least one mobile terminal device (Col. 5, lines 16-17), and said update additional information data being available for said at least one mobile terminal device (Col. 5, lines 50-54), said mobile terminal device being connected to a server in a wireless (Col. 24, lines 11-14, where the invention can be carried out on one or more computer systems, and Col 24, lines 55-58, where computer systems can include a communications interface 724, and Col. 24, lines 61 – Col 25, line 4, where a communications interface 724 is provided signals from communication channel 728, which can be implemented using a wireless medium) data network (Col. 5, lines 50-58, where the data server provides supplemental materials to the user equipment), said at least one mobile terminal device comprising components for receiving said broadcast from said at least one broadcast station and for receiving said update additional information data from said broadcast station via said server (Col. 5, lines 25-33, where delivery of broadcast material can be via wireless communication channel, and the user equipment has an appropriate communication interface), comprising: transmitting said broadcast from said at least one broadcast station to said at least one mobile terminal device (Col. 5, lines 16-17), transmitting said update additional information data of said current radio broadcast from said at least one broadcast station to said server, via a network connection between said server and said

radio station (Col. 5, lines 36-41, where data is sent from the provider to the server and therefore is sent over a network connection), determining at the server at least one mobile terminal device to be supplied with said update additional information data of said current radio broadcast (Col. 5, lines 50-58, where data server provides supplemental materials to user equipment, and therefore must determine user equipment to send the supplemental materials to), updating said update additional information data of said current radio broadcast to said at least one determined mobile terminal device via said wireless (Col. 24, line 61 – Col. 25, line 4, where communication channel can be implemented using a wireless medium) communication network (Col. 5, line 59 - Col. 6, line 2, where data server retrieves supplemental information pertaining to the specific item being broadcast), and displaying said broadcast and said update additional information data of said current radio broadcast on said mobile terminal device (Col. 6, lines 54-57, specifically displayed)".

21. With respect to Claim 15, Mackintosh discloses: "Software tool comprising program code means stored on a computer readable medium for carrying out the method of claim 8 when said soft-ware tool product is run on a mobile terminal (Col. 24, lines 11-14)".

22. With respect to Claim 16, Mackintosh discloses: "Computer program product for providing update additional information data of a broadcast transmission via a network onto a mobile terminal device (Col. 12, lines 19-22 and Fig 7), comprising loadable

program code means for carrying out the steps of claim 1 when said program is run on a network device (Col. 24, lines 11-14)".

23. With respect to Claim 17, Mackintosh discloses: "Computer program product comprising program code means stored on a computer readable medium for carrying out the method of claim 8 when said program product is run on a mobile terminal (Col. 24, lines 11-14)".

24. With respect to Claim 19, Mackintosh discloses: "Mobile terminal device, capable of displaying update additional information data related to contents of a current radio broadcast received from a broadcast station (Col. 6, lines 54-57), comprising: a radio module for receiving said broadcast (Col. 24, lines 10-19, where the invention can be implemented by one or more computer systems 702, and Col. 24, lines 55-58 and Col. 24, lines 61 – Col 25, line 4, where the computer system 702 has a communication interface with signals provided by channel 728, which can include RF link), a wireless network module for receiving said update additional information data of said current radio broadcast (Col. 24, lines 61 – Col 25, line 4, where the communication interface has signals provided by channel 728, which can include wireless medium), a controller for processing said received update additional information data of said current radio broadcast (Col. 7, lines 29-32 and Col. 24, lines 19-21, where an example system can include one or more processors), said controller being connected to said wireless network module (Fig 13, where processor 704 is connected to communications interface

and channel 728 through a bus), a memory connected to said controller (Col. 24, lines 30-35, and Fig 13 where processor 704 is connected to memory 708 and secondary memory 710 through a bus) for storing said processed update additional information data of said current radio broadcast (Col. 3, lines 49-52), and a display module connected to said controller for displaying said processed update additional information data of said current radio broadcast (Col. 6, lines 54-57, where the information is displayed to the user, and Fig 7 which shows an example of the displayed material)".

25. With respect to Claim 20, Mackintosh discloses: "Mobile terminal device according to claim 19, wherein said radio module is connected to said controller (Fig 13, where the processor is connected through a bus, to communication interface and communication channel, which refereeing to Col 24, line 66 - Col 25, line 3 can include an RF link), and wherein said radio module is connected to said wireless network module to transfer data from said radio module to said wireless network module (Col. 24, lines 61-67, and Col. 25, line 1, where data transferred via communications interface can be electromagnetic, and further where this data is provided to communications interface by communications channel which can be implemented using a wireless medium)".

26. With respect to Claim 22, Mackintosh discloses: "Mobile terminal device according to claim 19, further comprising a cellular telephone module being connected to said controller (Col. 24, line 61 – Col 25, line 4, where the communications interface

is provided with signals from the communication channel, which can include a cellular phone link, and Fig 13, where processor is connected, through a bus, to communication interface and communication channel)”).

27. With respect to Claim 23, Mackintosh discloses: “Mobile terminal device according to claim 19, further comprising a television module (Col. 6, lines 24-27, specifically where the broadcast materials delivered to the user is a television broadcast, and for the mobile terminal to function there must be a television module for processing the television broadcast) being connected to said controller (Col. 24, line 61-Col 25, line 4, where communication interface receives signals from communication channel, which carries signals such as cable, and Fig 13, where processor is connected through a bus to communications interface and communication channel)”).

28. With respect to Claim 24, Mackintosh discloses: “Broadcast station for providing broadcast data (Col. 5, lines 13-15), said broadcast data comprising at least one broadcast to be provided to mobile terminal devices (Col. 5, lines 13-15) and additional information data related to said at least one broadcast to be provided to a server (Col. 5, lines 36-41), said broadcast station comprising: a component for generating said broadcast (Col. 5, lines 13-15) and for generating said additional information data (Col. 5, lines 36-41), a broadcast transmitter for transmitting said broadcast (Col. 21, lines 42-46), and a network module for transferring said additional information data to said server (Col. 5, lines 36-41, where supplemental information is provided to a data server,

and Col. 24, lines 55-61, where a computer system for implementing the invention includes a communications interface such as a network interface)".

***Claim Rejections - 35 USC § 103***

29. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**30. Claims 2, 18, 21, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mackintosh in view of linuma et al. (US 6,230,325 B1).**

31. With respect to Claim 2, Mackintosh discloses: "Method according to claim 1, wherein said server uses a presence for determining said at least one mobile terminal device to be updated with said update additional information data of said current radio broadcast (Col. 17, lines 37-39, where the user's terminal must be on and active during a broadcast to have data codes provided)".

Mackintosh does not disclose: "wherein said server uses a presence database".

However, linuma discloses: "wherein said server uses a presence database (Col. 10, lines 18-22, where a user ID and password are verified to determine whether or not they are registered in advance, indicating that there is a database of user IDs and corresponding passwords at the database center)"



It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the broadcast system of Mackintosh with the teachings of linuma to include support for a server using a presence database. Motivation to combine these references comes from using a user ID and password to register users in advance as to limit the overall number users and/or to verify the identity of a user to prevent fraudulent access.

32. With respect to Claim 18, Mackintosh discloses: "Network server (Col. 5, lines 36-41, specifically data server) for providing update additional information data related to the contents of at least one current radio broadcast from at least one broadcast station (Col. 5, lines 36-41), said update additional information data to be supplied to at least one mobile terminal device (Col. 5, lines 50-58), comprising: a network module for receiving said update additional information data from said broadcast station via a network connection between said server and said radio station (Col. 5, lines 36-41, and Fig 5, where the internet connects the server and broadcaster, therefore to function the server must have a network module to communicate with the network)", "a controller being connected to said network module (Col. 24, lines 11-20, where the invention may be implemented using one or more computer systems, and a computer system has a processor, and Col. 24, lines 55-58, where computer system includes a communications interface and Fig 13, where the processor is connected to the communications interface via a bus), for processing update additional information data (Col. 5, lines 50-54, where data from the provider is used to retrieve supplemental information)", and "and a

wireless network module connected to said controller (Col. 24, line 61 – Col 25. line 4, where the communications interface is provided signals by the communication channel, which can be implemented using a wireless medium) for updating said update additional information data to said determined mobile terminal device (Col. 5, lines 50-54, where the server provides the supplemental information to the user equipment)”.

Mackintosh does not disclose: “a database for storing indications of said at least one mobile terminal device to be updated with said update additional information data”, or “a controller being connected to said database for receiving said indications of said at least one mobile terminal device and for determining at least one mobile terminal device to be supplied with said update additional information data”.

However, linuma discloses: “a database for storing indications of said at least one mobile terminal device to be updated with said update additional information data (Col. 10, lines 18-27, where user ID and password are registered in advance, and verified by the database computer system, or server, before supplemental data is sent, therefore this user ID and password registered in advance indicates at least one mobile terminal to be updated with supplemental information)”, and “a controller being connected to said database for receiving said indications of said at least one mobile terminal device and for determining at least one mobile terminal device to be supplied with said update additional information data (Col. 10, lines 18-27 and Col. 10, lines 46-47, where the sub computer acts as a gateway processor, and is a controller connected

to a database of user IDs and passwords because the sub computer verifies that these user IDs and passwords were registered in advance)".

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the broadcast system of Mackintosh with the teachings of linuma to include support for a server using a database to store indications of at least one mobile device to be supplied with supplemental information. Motivation to combine these references comes from using a user ID and password to register users in advance as to limit the overall number users and/or to verify the identity of a user to prevent fraudulent access.

33. With respect to Claim 21, Mackintosh does not disclose: "wherein said radio module comprises a radio data system (RDS) module for determining said broadcast station".

However, linuma discloses "wherein said radio module comprises a radio data system (RDS) module (Col. 13, line 67 – Col. 14, line 7, where the RDS may be used to multiplex data to be transmitted with FM radio broadcasting) for determining said broadcast station (Col. 13, line 67 – Col. 14, line 7, where the RDS may be used to multiplex data to be transmitted with FM radio broadcasting, and where RDS includes support for the client device to display a station name, as shown by "Using the Radio Data System", August 19 2000, 1) Station name, lines 1-4)"

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the broadcast system of Mackintosh with the teachings of linum to

include support for RDS. Motivation to combine these comes from linuma, who discloses: “RDS being one way to multiplex data to be transmitted with FM radio broadcasting” (Col. 13, line 67—Col. 14, line 3). Therefore by combining the references one can multiplex data with FM broadcasting to provide additional data such as station name to client devices.

34. With respect to Claim 25, Mackintosh discloses: “System for providing broadcast data (Abstract, lines 3-4) comprising a broadcast station for sending a radio broadcast (Col. 5, lines 13-15) and for providing update additional information data related to contents of a current radio broadcast (Col. 5, lines 36-41); a network server for receiving said update additional information data (Col. 5, lines 36-41), wherein said update additional information data is to be supplied to at least one mobile terminal device (Col. 5, lines 50-58), said network server comprising:

a network module for receiving said update additional information data of said current radio broadcast from said broadcast station via a network connection between said server and said radio station (Col. 5, lines 36-41, and Fig 5, where the internet connects the server and broadcaster, therefore to function the server must have a network module to communicate with the network)”,

“a controller for being connected to said network module (Col. 24, lines 11-20, where the invention may be implemented using one or more computer systems, and a computer system has a processor, and Col. 24, lines 55-58, where computer system includes a communications interface and Fig 13, where the processor is connected to

the communications interface via a bus), for processing said update additional information data (Col. 5, lines 50-54, where data from the provider is used to retrieve supplemental information)", and

“a wireless network module connected to said controller (Col. 24, line 61 – Col 25, line 4, where the communications interface is provided signals by the communication channel, which can be implemented using a wireless medium) for updating said update additional information data to said determined mobile terminal device (Col. 5, lines 50-54, where the server provides the supplemental information to the user equipment), and

a mobile terminal device capable of displaying said update additional information data of said current radio broadcast (Col. 6, lines 54-57), comprising:

a radio module for receiving said current radio broadcast (Col. 24, lines 10-19, where the invention can be implemented by one or more computer systems 702, and Col. 24, lines 55-58 and Col. 24, lines 61 – Col 25, line 4, where the computer system 702 has a communication interface with signals provided by channel 728, which can include RF link),

a wireless network module for receiving said update additional information data of said current radio broadcast (Col. 24, lines 61 – Col 25, line 4, where the communication interface has signals provided by channel 728, which can include wireless medium),

a controller for processing said received update additional information data of said current radio broadcast (Col. 7, lines 29-32 and Col. 24, lines 19-21, where an

example system can include one or more processors), said controller being connected to said wireless network module (Fig 13, where processor 704 is connected to communications interface and channel 728 through a bus),

a memory connected to said controller (Col. 24, lines 30-35, and Fig 13 where processor 704 is connected to memory 708 and secondary memory 710 through a bus) for storing said processed update additional information data of said current radio broadcast (Col. 3, lines 49-52), and

a display module connected to said controller for displaying said processed update additional information data of said current radio broadcast (Col. 6, lines 54-57, where the information is displayed to the user, and Fig 7 which shows an example of the displayed material)".

Mackintosh does not disclose: "a database for storing indications of said at least one mobile terminal device to be updated with said update additional information data", or "a controller for being connected to said database for receiving said indications of said at least one mobile terminal device and for determining at least one mobile terminal device to be supplied with said update additional information data of said current radio broadcast".

However, linuma discloses: "a database for storing indications of said at least one mobile terminal device to be updated with said update additional information data (Col. 10, lines 18-27, where user ID and password are registered in advance, and verified by the database computer system, or server, before supplemental data is sent,

therefore this user ID and password registered in advance indicates at least one mobile terminal to be updated with supplemental information)", and

"a controller for being connected to said database for receiving said indications of said at least one mobile terminal device and for determining at least one mobile terminal device to be supplied with said update additional information data of said current radio broadcast (Col. 10, lines 18-27 and Col. 10, lines 46-47, where the sub computer acts as a gateway processor, and is a controller connected to a database of user IDs and passwords because the sub computer verifies that these user IDs and passwords were registered in advance)".

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the broadcast system of Mackintosh with the teachings of Linuma to include support for a server using a database to store indications of at least one mobile device to be supplied with supplemental information. Motivation to combine these references comes from using a user ID and password to register users in advance as to limit the overall number users and/or to verify the identity of a user to prevent fraudulent access.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MATTHEW S. LINDSEY whose telephone number is

Art Unit: 2100

(571)270-3811. The examiner can normally be reached on Mon-Thurs 7:30-5, Fridays 7:30-1.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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MSL  
5/29/2008

/John Follansbee/

Supervisory Patent Examiner, Art Unit 2151